



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,391	01/16/2004	Hideo Narita	04853.0110	6069
22852	7590	10/15/2008	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			JOYCE, WILLIAM C	
			ART UNIT	PAPER NUMBER
			3656	
			MAIL DATE	DELIVERY MODE
			10/15/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/758,391

**Applicant(s)**

NARITA ET AL.

**Examiner**

William C. Joyce

**Art Unit**

3682

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 3-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This Office Action is in response to the amendment filed September 22, 2008 for the above identified patent application.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hezel (EP 1 129 828), Larsson (USP 4,904,148), or Okamoto (JP 10-225881) in view of Akeel (USP 5,293,107).

Hezel discloses (for example, Figures 9-10) an articulated robot comprising a plurality of joint arms connected to one another, the rotation axis of the joints being inclined relative to one another. Specifically, a first arm part (14') having a pair of inclined rotation axes and a second arm part (30) having a pair of inclined rotation axes, wherein the first and second arm parts are coaxial.

Larsson discloses (for example, Figure 4) an articulated robot comprising a plurality of joint arms connected to one another, the rotation axis of the joints being

inclined relative to one another. Specifically, a first arm part (14) having a pair of inclined rotation axes, a second arm part (15a) having a pair of inclined rotation axes, and a third arm part (15b) having a pair of inclined rotation axes, wherein the first, the second, and the third arm parts can be positioned along a single axis.

Okamoto discloses (for example, Figure 6) an articulated robot comprising a plurality of joint arms connected to one another, the rotation axis of the joints being inclined relative to one another. Specifically, a first arm part having a pair of inclined rotation axes, a second arm part having a pair of inclined rotation axes, and a third arm part having a pair of inclined rotation axes.

The prior art to any one of Hezel, Larsson, and Okamoto fails to teach the claimed motor actuator used to rotate the arm parts around each respective rotation axis. It was well known in the art to use a motor having a shaft and reduction mechanism as claimed for controlling a robotic device. For example, the prior art to Akeel teaches (Figure 1 & 3) a motor and gear arrangement for displacing relatively rotating robotic arm parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to control the arm parts of either Hezel, Larsson, or Okamoto with the motor and speed reduction mechanism of Akeel, motivation being to provide a compact motor with gear arrangement for operating the robot arms at a predetermined speed.

The prior art to any one of Hezel, Larsson, and Okamoto fails to teach the motor actuators being alternately arranged, however Akeel illustrates in Figure 8 a pair of motors (134,136) positioned in a first arm part (148), no motors being positioned in an adjacent arm part (15), and a pair of motors (138,140) being positioned in a third arm part. It would have been obvious to one of ordinary skill in the art at the time the invention was made to position the motor actuators of either Hezel, Larsson, or Okamoto in an alternate manner, as taught by Akeel, motivation being to provide a compact arrangement while facilitating in the assembly of the device.

### ***Response to Arguments***

Applicant's arguments filed September 22, 2008 have been fully considered but they are not persuasive. Specifically, Applicant argues the prior art to Hezel and Larsson do not teach arm parts being coaxially arranged. Referring to Figures 9-10 of Hezel and Figure 4 of Larsson, it was known in the art to form a robotic device having coaxial arm parts. Accordingly, the amendment to claim 1 does not define over the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William C. Joyce/ 9/29/08  
Primary Examiner, Art Unit 3682